

Amendments to the Specification:

Please replace paragraph [0011] with the following rewritten paragraph:

[0011] The content of each of the content portions, documents or web pages making up the document collection are determined in step S30. The words on each content portions, document or web page are added to a word / document frequency matrix. The weights of the words are determined and a weighted word document frequency matrix is created. The weighting may use term frequency/inverse document frequency (TF · IDF) log of the term frequency, $1 + (\log_{10} \text{ of the term frequency})$ or any other known or later developed technique of weighting. Control then continues to step S40.

Please replace paragraph [0038] with the following rewritten paragraph:

[0038] In step S340, a weighted content data structure is determined. The weighted content data structure may be a word x document matrix (weighted content matrix W), a word x document adjacency list or any other known or later developed technique for storing the content information about the document collection or web site page. Control then continues to step S350.

Please replace paragraph [0039] with the following rewritten paragraph:

[0039] In step S350 spreading activation according to the following formulas (1-2) is applied to generate initial document vector A.

$$A(1) = \text{ALPHA} * \text{Matrix S} * E \quad (1)$$

$$A(t) = \text{ALPHA} * \text{Matrix S} * A(t-1) + E \quad (2)$$

The formula is applied t number of times where the matrix S reflects the topology matrix and vector E reflects the user path. The value ALPHA reflects the probability a user will click through to a document or web page and therefore ranges between 0 and 1. Control then continues to step S360.

Please replace paragraph [0040] with the following rewritten paragraph:

[00010] In step S360, the document vector A is multiplied by the weighted content matrix W to determine the user's information need based on the user path to create an information need keyword vector. The weighted content matrix W is obtained from the content information obtained from step S30. W is a matrix of words × documents, where the entries specify the frequency of the word in a given document. The words may then be weighted by any known techniques for weighting, such as the well-known in the art TF.IDF, or later developed technique for weighting. The most relevant keyword information is then

indicated by higher number entries in the information keyword vector position. Control then continues to step S370 where the process ends and control is returned to the calling step S70 of Fig. 1.